



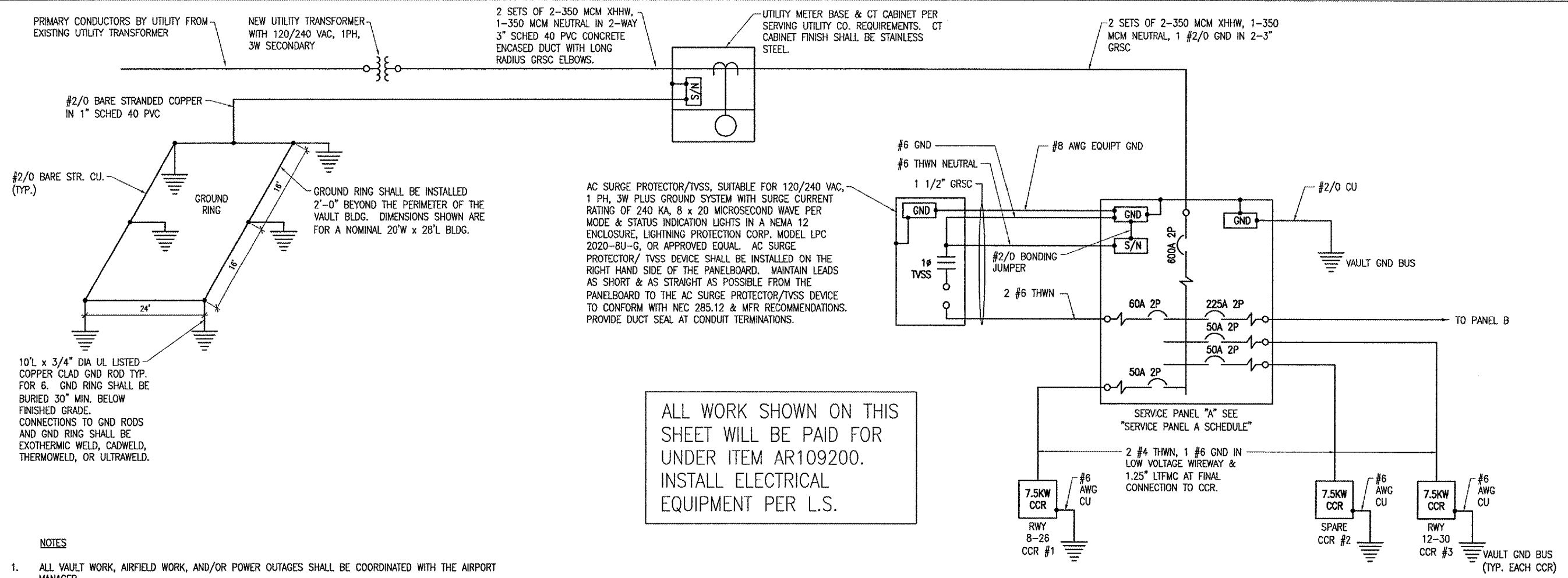
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DIXON MUNICIPAL AIRPORT
CHARLES R. WALGREEN FIELD

CONSTRUCT REPLACEMENT
AIRFIELD ELECTRICAL VAULT
AIP PROJECT NO. 3-17-0036-BB
IDA PROJECT NO. C73-3548

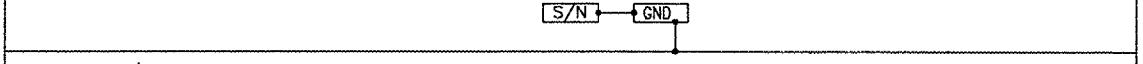


ALL WORK SHOWN ON THIS SHEET WILL BE PAID FOR UNDER ITEM AR109200. INSTALL ELECTRICAL EQUIPMENT PER L.S.

NEW VAULT ELECTRICAL ONE-LINE DIAGRAM

- NOTES
1. ALL VAULT WORK, AIRFIELD WORK, AND/OR POWER OUTAGES SHALL BE COORDINATED WITH THE AIRPORT MANAGER.
2. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (NEC MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
3. ALL EQUIPMENT SHOWN IS NEW UNLESS NOTED OTHERWISE.
4. COORDINATE ELECTRIC SERVICE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY: COMMONWEALTH EDISON COMPANY ATTN. MR. MARK APPLEQUIST 919 WEST FIRST ST. DIXON, IL 61021 PHONE 815-284-5871 FAX 815-284-5840
5. CONTRACTOR SHALL CONFIRM POWER REQUIREMENTS WITH THE ACTUAL NAMEPLATE ON EACH CONSTANT CURRENT REGULATOR, UNIT HEATER, FAN, OR OTHER EQUIPMENT, AND ADJUST CIRCUIT BREAKER, WIRE SIZES & CONDUIT SIZES TO CONFORM WITH NEC & MANUFACTURER'S RECOMMENDATIONS WHERE APPLICABLE. WIRE SIZES SHOWN ON THE PLANS ARE MINIMUM.
6. SEE PANELBOARD SCHEDULES FOR ADDITIONAL REQUIREMENTS FOR EACH RESPECTIVE PANEL.
7. HIGH VOLTAGE & LOW VOLTAGE CIRCUITS SHALL NOT BE INSTALLED IN THE SAME RACEWAY.
8. BRANCH CIRCUITS TO REGULATORS SHALL BE INSTALLED IN THE RESPECTIVE LOW VOLTAGE WIREWAY/DUCT, WITH GRSC AT TRANSITIONS AND UL LISTED LIQUID TIGHT FLEXIBLE METAL CONDUIT AT FINAL CONNECTIONS TO THE REGULATORS. CONDUITS SHALL BE SIZED IN ACCORDANCE WITH NEC.
9. BOND ALL REGULATORS TO THE RESPECTIVE VAULT GROUND BUS WITH A DEDICATED #6 AWG BONDING JUMPER FOR EACH REGULATOR.
10. LTFMC DENOTES LIQUID TIGHT FLEXIBLE METAL CONDUIT UL LISTED, SUNLIGHT RESISTANT, & SUITABLE FOR GROUNDING. LIQUID TIGHT FLEXIBLE METAL CONDUIT AND ASSOCIATED FITTINGS SHALL BE U.L. LISTED TO MEET THE REQUIREMENTS OF NEC 350.6. LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS USED FOR FLEXIBILITY (INCLUDING CONNECTIONS TO CCR'S & TRANSFORMERS) SHALL REQUIRE AN EXTERNAL BONDING JUMPER OR INTERNAL EQUIPMENT GROUNDING CONDUCTOR PER NEC 350.60. EXTERNAL BONDING JUMPERS USED WITH CCR INSTALLATIONS SHALL BE #6 AWG COPPER (MINIMUM). DO NOT INSTALL LTFMC THAT IS NOT UL LISTED.
11. FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH METER SOCKET, PANELBOARD, LOAD CENTER, DISCONNECT & CONTROL PANEL TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS, PER THE REQUIREMENTS OF NEC 110.16 "FLASH PROTECTION".
12. ALL CONDUCTORS/WIRING SHALL BE COPPER.

SERVICE PANEL A table with columns: CKT #, DUTY, SIZE, and a diagram of the panel bus and breakers.



600 AMP, 120/240 VAC, 1 PHASE, SERVICE PANEL WITH A 600 AMP, 2 POLE MAIN BREAKER IN A NEMA 1 SURFACE MOUNT ENCLOSURE. PANELBOARD SHALL BE UL LISTED SUITABLE FOR SERVICE ENTRANCE. PANELBOARD SHALL HAVE 36" OF CIRCUIT BREAKER MOUNTING SPACE & ACCOMMODATE BRANCH/FEEDER BREAKERS UP TO 250 AMP FRAME SIZE. PANELBOARD SHALL BE SQUARE D I-LINE, HCM SERIES OR APPROVED EQUAL WITH BOX, TRIM, & DOOR.

- NOTES
1. PANELBOARD BUS SHALL BE BRACED FOR 42,000 AMPS SYMMETRICAL MINIMUM AT 240 VAC.
2. PANELBOARD BUSSES SHALL BE COPPER. NEUTRAL BUS SHALL BE COPPER, EQUIPMENT GROUND BAR SHALL BE COPPER.
3. MAIN BREAKER & ALL FEEDER & BRANCH BREAKERS SHALL HAVE AN INTERRUPTING RATING OF 42,000 AIC MINIMUM AT 240 VAC.
4. INCLUDE PHENOLIC ENGRAVED LEGEND PLATE FOR MAIN BREAKER LABELED "SERVICE DISCONNECT".
5. INCLUDE PHENOLIC ENGRAVED LEGEND PLATE LABELED "SERVICE PANEL A 120/240 VAC, 1 PHASE, 3-WIRE".

Table with columns: No., Drawing Issue Description, Date, By.

Date: JUNE 23, 2006
Sheet Title

NEW VAULT ELECTRICAL ONE LINE DIAGRAM (SHEET 1)

843-05C8010
Project Number
KNL 06/14/06
Layout By Date
KNL 06/14/06
Designed By Date
RMH 06/23/06
Reviewed By Date
MV
Sheet No.

E10